

WHAT IS CLAIMED IS:

1. A belt conveying mechanism for an ink-jet recording apparatus comprising:  
5 a plurality of rollers;  
a conveyor belt that conveys a record medium thereon, the conveyor belt spanned the plurality of rollers;  
an ink holding portion that holds ink, the ink holding portion arranged on a surface of the conveyor belt; and  
10 an ink removing member that removes the ink held in the ink holding portion.
2. The belt conveying mechanism for an ink-jet recording apparatus according to claim 1,  
15 further comprising a recessed portion formed on the surface of the conveyor belt; and wherein  
the ink holding portion is arranged within the recessed portion to hold ink within the recessed portion.
- 20 3. The belt conveying mechanism for an ink-jet recording apparatus according to claim 1, wherein the ink holding portion includes a plurality of protrusions formed on the surface of the conveyor belt.
- 25 4. The belt conveying mechanism for an ink-jet

recording apparatus according to claim 3, wherein the plurality of protrusions protrude perpendicularly to the surface of the conveyor belt.

5           5. The belt conveying mechanism for an ink-jet recording apparatus according to claim 3, wherein the plurality of protrusions extend in parallel with each other perpendicularly to a running direction of the conveyor belt.

10           6. The belt conveying mechanism for an ink-jet recording apparatus according to claim 3, wherein each of the plurality of protrusions has an overhanging portion thereof inclining to a downstream of a running direction of the conveyor belt.

15           7. The belt conveying mechanism for an ink-jet recording apparatus according to claim 3, wherein an angle between the surface of the conveyor belt and a face of each protrusion on an upstream side of a running direction of the conveyor belt is larger than an angle between the surface of  
20 the conveyor belt and a face of the protrusion on a downstream side of the running direction of the conveyor belt.

          8. The belt conveying mechanism for an ink-jet recording  
25 apparatus according to claim 3, wherein

the plurality of protrusions are formed in a recessed portion formed on the surface of the conveyor belt, and positioned below a conveying surface of the conveyor belt on which the record medium is conveyed.

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9. The belt conveying mechanism for an ink-jet recording apparatus according to claim 3, wherein the ink removing member is made of felt.

10            10. The belt conveying mechanism for an ink-jet recording apparatus according to claim 9, wherein the ink removing member has the same length as the recessed portion in a running direction of the conveyor belt.

15            11. The belt conveying mechanism for an ink-jet recording apparatus according to claim 1, wherein the ink holding portion includes an absorber arranged on the surface of the conveyor belt.

20            12. The belt conveying mechanism for an ink-jet recording apparatus according to claim 11, wherein, when the ink holding portion is in a position corresponding to either of the plurality of rollers, the ink removing member is brought into contact with the ink holding portion to remove ink.

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13. The belt conveying mechanism for an ink-jet recording apparatus according to claim 11, wherein the ink removing member is made of metallic material.

5           14. The belt conveying mechanism for an ink-jet recording apparatus according to claim 11, wherein the ink removing member is a cylindrical roller.

10           15. The belt conveying mechanism for an ink-jet recording apparatus according to claim 1, wherein the ink removing member can selectively take a position for being in contact with the ink holding portion and a position for being out of contact with the ink holding portion.

15           16. The belt conveying mechanism for an ink-jet recording apparatus, comprising:  
            a plurality of rollers;  
            a conveyor belt that conveys a record medium thereon, the conveyor belt spanned the plurality of rollers;  
20           an ink holding portion that holds ink, the ink holding portion arranged on a surface of the conveyor belt;  
            an ink removing member that removes the ink held in the ink holding portion;  
            a sensor that detects a position of the ink holding  
25           portion; and

a drive mechanism that moves the ink removing member into contact or out of contact with the ink holding portion, on the basis of a position of the ink holding portion and a running speed of the conveyor belt detected by the sensor.

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17. An ink-jet recording apparatus, comprising:  
the belt conveying mechanism according to claim 1; and  
an ink-jet head that ejects ink onto the record medium  
being conveyed by the conveyor belt of the belt conveyor.

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